BEFORE THE ARIZONA MEDICAL BOARD

In the Matter of **JOSE A. PADILLA, M.D.** Holder of License No. **25251** For the Practice of Allopathic Medicine In the State of Arizona.	Board Case No. MD-04-1116A **FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER** (Letter of Reprimand)

The Arizona Medical Board ("Board") considered this matter at its public meeting on December 8, 2005. Jose A. Padilla, M.D., ("Respondent") appeared before the Board with legal counsel Frederick M. Cummings for a formal interview pursuant to the authority vested in the Board by A.R.S. § 32-1451(H). The Board voted to issue the following Findings of Fact, Conclusions of Law and Order after due consideration of the facts and law applicable to this matter.

FINDINGS OF FACT

1. The Board is the duly constituted authority for the regulation and control of the practice of allopathic medicine in the State of Arizona.

2. Respondent is the holder of License No. 25251 for the practice of allopathic medicine in the State of Arizona.

3. The Board initiated case number MD-04-1116A after receiving notification of a medical malpractice settlement involving Respondent's care and treatment of a seventy-three year-old female patient ("NR"). NR was diagnosed with degenerative arthritis of her knee, diabetes, obesity and hypertension. On September 20, 2001 Respondent performed a right total knee arthroplasty under spinal anesthesia and tourniquet control. The post-operative nursing notes at 11:10 the morning of surgery note NR's right foot was cool with no palpable pedal pulses. The nursing notes also indicate she was unable to obtain capillary refill. Respondent

was contacted and he ordered a Dopplar study. The Dopplar study did not identify any pedal pulses, but did identify a popliteal pulse.

4. Respondent examined NR and felt he could palpate a faint pulse in the foot. Respondent applied warm towels to the foot and returned at 1:30 and verified palpation of a pulse. A nursing note at 4:00 noted an improving pulse, but NR unable to wiggle her toes. On September 21, 2001 NR's hemoglobin was 6.2 and Respondent noted she had a history of decreased pulses post-op and they returned with warming. Respondent noted NR had an incomplete peroneal palsy of the right leg with no active dorsiflexion of the toes. On September 22, 2001 Respondent's associate evaluated NR, noted her right foot to be cold, without active dorsiflexion of the toes. Respondent's associate ordered a Dopplar study and it could not demonstrate pedal pulses or any flow distal to the popliteal artery. He then transferred NR to a vascular surgeon who bypassed an injury in the popliteal artery. NR subsequently required a fasciotomy and later amputation of her right leg.

5. Respondent testified NR had been under his care for about five years and elected to undergo the total knee arthroplasty. Respondent testified one of the issues he dealt with during surgery was a tumor in the anterior aspect of NR's knee and, as he debrided it, he achieved a good stable support for the prosthesis and proceeded. Respondent noted he had an intraoperative fracture of one of the femoral condyles that he pinned. Respondent testified these factors are important because of the post-operative bleeding that occurred – he felt the bleeding was likely a result of those issues. Respondent testified that when NR got to the recovery room she had a warm foot with pulses present and then NR went to the floor and about an hour later there was the first notation made of no pulse. Respondent testified he asked for an arteriogram, but was told by the radiologist that it was not available and the radiologist recommended a Dopplar study. Respondent testified the Dopplar study did not show a pulse, it showed flow through the trifurcation and no flow at the dorsalis pedis or posterior tibialis arteries. Respondent

testified he felt he was looking at a vasospasm so he applied warm compresses and waited with NR until there was a pulse and he then applied a SAT monitor to the foot and it registered at 93, the same as the other foot.

6. Respondent testified that when he saw NR the following morning her hemoglobin was low and he transfused her and found peroneal nerve palsy that he felt was likely from the hematoma that had formed from the amount of bleeding. Respondent noted he also held the CPM as it is typical in nerve palsies and it was the next day when he was out of town and his associate saw NR and restarted the CPM. Respondent noted subsequent to that, NR lost her pulse. Respondent testified he felt she developed a pseudo aneurysm from some type of intimal or traction injury and that is what led to her problem. Respondent noted NR was transferred to a vascular surgeon who performed a bypass. Respondent testified he was in a meeting in Tucson at the time of surgery and he spoke to the surgeon when the surgery was complete and the surgeon did not say anything about a transsection and said he thought it was a pseudo aneurysm or that it had ripped. Respondent testified he asked the surgeon if he did a faciotomy since it was several hours old already and he said "no," but subsequently the surgeon did the faciotomy and several days later did the above-the-knee amputation. Respondent testified there is no doubt in his mind in retrospect that the arteriogram he first requested was the test indicated and in his practice since then all his patients go to Tucson for an arteriogram.

7. The Board directed Respondent to his preoperative assessment of NR and noted it could not find Respondent's evaluation of NR's vascular status, any comment on her dorsalis pedis or posterior tibia. Respondent testified he always goes through the same examination whenever he evaluates someone for knee pain and starts with a foot examination. Respondent testified he would be the first to admit he did not document that, is in error for doing that, and he has taken steps to avoid that. Respondent testified what happened at the time was he used to go to an outlying clinic and he would write his findings on a scrap piece of paper and he would

dictate from that, but the scrap of paper would not end up in the chart and that was an error. Respondent testified he has corrected that and now has an intake sheet that he fills out. Respondent noted when he dictates from the intake sheet it has the pulses and the patient's neurovascular status. Respondent was asked if NR was having a severe valgus or a valgus deformity. Respondent testified NR had a varus deformity. Respondent was asked to explain his reasoning for using a posterior stabilizer. Respondent testified it was his routine to use a posterior stabilized knee and he finds in his hands he can achieve a very good outcome with that. Respondent testified his other concern was he felt the tumor she had was going to be an issue and, he did not know how far down he was going to possibly have to stem the prothesis and what else he would have to do, so he just proceeded directly to the posterior stabilizer. Respondent was asked if there was bone loss prior to the surgery – about the height of the tibial plafond. Respondent testified NR's tibial plafond was intact and her tumor really extended anteriorly from the anterior cortex of the tibia. The Board noted Respondent used a fifteen millimeter spacer and asked if NR had a very bad varus deformity. Respondent testified it was. Respondent was asked if NR's femoral condyle medial was completely fractured off. Respondent testified it was a crack that occurred and he pinned it to avoid it displacing, but it was not a displaced crack – he saw a crack beginning and he pinned and cemented it.

8. Respondent was asked to describe his protocol when he does a total joint replacement – does he normally let the tourniquet down after he does all the cuts before he cements the prosthesis to look for any posterior bleed. Respondent testified if he does a lateral release he will frequently let the tourniquet down, but if he does not do a lateral release, if it is just primarily total knee, typically not. Respondent testified in this case he thought about it because it was a little more like a revision, but he felt all he was going to be dealing with was the oozing from the anterior crest of the tibia and from the femoral condyle and that he was not going to be helping her at all by letting the tourniquet down. The Board confirmed Respondent does not

routinely let the tourniquet down in primary total knees. Respondent was directed to his operative notes where he talked about letting the tourniquet down and was asked if the note would have been complete if he would have commented on the viability of the foot that he said he normally does after a total knee. Respondent testified he now comments on that, he always checks, but now he actually documents it. The Board clarified that in his operative note for NR he did not document anything on it.

9. The Board asked about the call Respondent received from the recovery room nurse informing him that NR's foot was cold. Respondent testified the nurse called him down to the recovery room and he applied warm compresses, which is not infrequent after a total knee. Respondent was asked to explain why it is not so infrequent to not feel any pulses when there is spasm. Respondent testified the amount of traction generated on the popliteal artery as he is doing the total knee can lead to some vasospasm and in the recovery room it is not uncommon for a few minutes for the foot to be colder than the other side and not to find a pulse. Respondent noted it is not infrequent where he comes in with a handheld Dopplar and shows the pulse and waits a few minutes and it comes back. The Board noted the vasospasm is in the calf and asked why Respondent put warm packs on the foot. Respondent testified he tries to induce blood flow down to the area and the warm towel is applied from the knee all the way down to the foot. The Board asked if it was placed posteriorly. Respondent testified it should be, but nurses tend to put it anteriorly. Respondent was asked how this affects posterior vasospasm. Respondent testified he thinks it is just the warmth it generates in the area that allows the vessel to relax and bring the blood flow back.

10. Respondent was asked if he puts his patients in the CPM machine in the recovery room. Respondent testified he does not and always starts the CPM the day after surgery. Respondent was asked when he was next notified of any vascular compromise of the foot. Respondent testified he was notified by the medicosurgical unit about one hour and a half to two

hours later when he was notified the foot was cold and the nurse was concerned and that is when he wanted the arteriogram. The Board confirmed this was four and one half hours after the surgery – approximately noon. Respondent was asked if there was no arteriogram available at that time. Respondent testified the hospital he was at did not do arteriograms and he was under the impression they did. Respondent was asked if he was told that because of the fleeting nature of the pulses and there possibly being a vascular cause that he needed better tests and probably should ship NR out. Respondent testified he came down to evaluate NR and once again had secured a pulse and oximetry that was equal to the other and unfortunately felt the foot was viable at that time. Respondent was asked where in the record the Board could find the pulse oximetry being equal on both sides. Respondent testified he did not document it because when he saw NR there were two or three nurses with him and when he put the pulse oximeter on he said he wanted it left on and wanted them to record it. The Board noted the nurses' notes do not reflect this and Respondent's notes do not say there was a pulse oximeter on the foot. Respondent testified he thought there was one in place.

11. Respondent was asked about the first post-operative day when he recorded that there were no pulses felt in the right foot. Respondent testified he was never called about the pulseless foot after the day of surgery. Respondent was asked what happened in the evening of the surgery. Respondent testified NR maintained her pulse and, in fact, it improved throughout the evening to the next day. Respondent noted when he came in the next day NR had a palpable pulse. Respondent was directed to the hospital records, specifically Respondent's progress notes from the first post-operative day. Respondent was asked what his first words in that note say. Respondent testified the note says "no complaints." Respondent was asked to continue reading the notes and explain what he wrote. Respondent testified the next entry was "AVSS" and this means afebrile vital signs stable and the following note meant "decreased pulses post-op yesterday, but they returned with the warming of the leg." Respondent testified the next entry

was "now however, has incomplete peroneal nerve palsy; no active dorsiflexion of foot and toes, but sensation intact in the first web space." Respondent was asked how his note that NR had no complaints could be correct when this is not the ordinary post-operative findings of having difficulty with dorsiflexion of the foot. Respondent testified NR did not notice it, the nurses did not notice it that morning, and he picked it up when he examined her and found she had peroneal nerve palsy. Respondent was asked what NR's pulses were that morning. Respondent testified they were intact. Respondent was asked if he documented that. Respondent testified he did not. Respondent was asked if knowing there was some problem with vascular supply that he was concerned about the day before did he think it was necessary to document it for good follow-up care. Respondent testified he did.

12. Respondent was asked what he thought caused the drop of hemoglobin and then the peroneal nerve palsy. Respondent testified he thought it was due to a hematoma. Respondent was asked if with that much hematoma should it have rung a bell that there was bleeding that was a long way from a routine total knee, that she should not have that much bleeding. Respondent testified he was thinking not just hematoma, but the dissection he did of the tibia and all the twisting and turning as he balanced her knee and he knows that with valgus knees he gets peroneal nerve palsies, but the dissection he was doing he felt he had probably stretched NR's peroneal nerve even with the hematoma that had developed, the paroneal nerve palsy was incomplete. Respondent was asked if the hemoglobin dropping to 6.2 indicates a very large amount of bleeding. Respondent indicated it did. Respondent was asked if it should have raised a red flag that there was a lot of bleeding causing the hematoma and maybe causing some nerve neuropraxia. Respondent testified it should and he felt the blood loss was due to his intraoperative dissection and having to take the tumor and femoral condyle fracture and all these events together had led to the blood loss.

13. Respondent was asked if his reference to "femoral condyle fracture" was a reference to what he previously testified was a just a crack. Respondent testified it was. Respondent was asked if, in light of the extravascular bleeding posteriorly, the posterolateral compression of the nerve, his thought there was a lot of bleeding in the back, and the swelling of the leg, it did not ring a bell for him to say "the hemoglobin has dropped, there is peroneal nerve damage and the leg is swollen." Respondent testified in retrospect it should have, but it did not at the time because, again she had an intact pulse in her foot, and when he did the oximetry test it was equal to the other foot. Respondent was asked if the Board was just supposed to believe him about the pulse being intact in the foot because it was not in the record. Respondent answered in the affirmative. Respondent was asked what his plans were for that day after he noticed evidence of nerve damage and difficult dorsiflexion. Respondent testified he loosened the dressing and held the CPM and transfused her for blood loss. Respondent was asked if he saw NR the next day. Respondent testified he did not because he was out of town. Respondent was asked what, if any, information about NR he gave to the covering physician. Respondent testified he told him NR had peroneal nerve palsy, that he had a problem with the foot pulse immediately after surgery, but that had recovered and he had transfused her, and that he was holding the CPM. Respondent was asked whether the covering physician would be able to find all this information from looking at NR's records since nothing had been documented. Respondent testified it was not in his notes, but was in the nurses' notes.

14. The Board noted the nurses' notes were not very clear because one shift says they can feel something and another says they could not and it has been documented all along that they also had a concern for the fleeting pulse and they did inform the physicians so no fault could be found with their conduct. Respondent was asked what he really thought had happened to NR when he was not there and she was transferred to Tucson, especially since he said the vascular surgeon told him there was no transsection of the popliteal artery, but the operative

notes say there was. Respondent testified it was interesting to note the surgeon's operative note had come back and he had handwritten the note about transsection – there is a blank where it was filled in later. Respondent noted he spoke to the surgeon at the time of NR's surgery and his report to Respondent was that the artery was not transected, but rather torn or ruptured like a pseudo aneurysm and that is truly what he believed happened – that NR had an intimal injury and that is why there were changes in her vascular status and, if he had an arteriogram, he could have avoided all of this. The Board noted Respondent probably would have saved the leg if he had the arteriogram and Respondent agreed.

15. Respondent was asked if he agreed his charts lacked proper documentation. Respondent agreed. Respondent was asked about peroneal nerve injury he thought was transient. Specifically, was he thinking it might come back once the hematoma subsided. Respondent testified he was thinking it might come back and it has been his experience in the past, and the literature documents, that incomplete peroneal nerve palsies recover. Respondent was asked if he put a posterior brace or anything to keep the foot in neutral. Respondent testified he did not recall. Respondent was asked if that would have helped if he found there was peroneal nerve damage. Respondent testified he did not think that putting an AFO would help a peroneal nerve palsy at that moment, but bending the knee, keeping the CPM off and loosening the dressing might help.

16. Respondent testified a landmark study by the Mayo Clinic of 12,000 total knee replacements found four injuries and not one transsection; there were two intimal tears, one pseudo aneurysm and one embolic event, but zero transected arteries. Respondent was asked where the blood was going if the procedure was done under tourniquet and NR's hemoglobin dropped to 6.4, - why would it go extrinsic to the artery if there was not a transsection. Respondent testified there was an intimal flap causing occlusion. The Board noted the vascular surgeon in Tucson said there was a transsection even though his note was handwritten into the

operative report after the fact. Respondent was asked how the blood got out into the soft tissue. Respondent testified the blood was coming from the tibial crest from where he had taken the tumor.

17. Respondent was asked to explain the mechanism of the injury – what initiates either the aneurysm issue or transsection that Respondent testified was rare. Respondent testified as he is doing a total knee he is trying to distract the tibia anteriorly to do the dissection and balancing he puts tension, traction, on the popliteal artery and that can lead to intimal injury that can create a false lumen the blood can get into and create a pseudo aneurysm. Respondent was asked to describe the mechanism of a transsection. Respondent testified he uses an oscillated saw to do the procedure and it is not a small instrument, it is a good one inch wide saw. Respondent noted this is why he believes if the artery was transsected it would have been completely transsected and NR never would have had a pulse; there never would have been pulse oximetry equal to the other leg. Respondent testified he was not arguing he caused an injury to the artery with a traction injury, he is just suggesting that he did not cut the artery with the saw because, if he had, there would have been a profound pulseless foot that stayed that way with no oxygen tension down in the foot. Respondent was asked if any of the drilling Respondent does goes near the area at all. Respondent testified it does not.

18. Respondent was asked NR's preoperative hemoglobin. Respondent testified he believed it was in the normal range – 13.2, if he remembered correctly. Respondent confirmed that postoperatively it went down to six – a seven gram decrease. Respondent was asked if he felt this drop was only due to the tibial crest issue. Respondent testified that was his feeling at the time, along with his having done a posterior stabilized prothesis that tends to bleed more. Respondent was asked if he has had a seven gram hemoglobin drop before. Respondent testified he could not say he has had a seven gram drop, but he has seen hemoglobin down to eight. The Board noted a drop to eight from thirteen is a five gram drop, but NR had a seven

gram drop and asked Respondent if this raised any red flags. Respondent testified unfortunately he was misled by NR's having oximetry readings in the foot and a pulse he could palpate and, in hindsight, he could look at it and say that should have raised a red flag, but at the time, looking at the facts in front of him, he was looking at a foot that looked viable so the thought of cutting an artery did not come into his head again after that examination. Respondent was asked if it was still his testimony that the seven gram loss in hemoglobin would be consistent with an intimal tear, even in retrospect. Respondent testified it would not be consistent with an intimal tear because the blood loss would not have been that significant initially. Respondent noted he was thinking at the time was that the blood loss, putting aside any popiteal artery injury, he had seen hemoglobins drop down to eight and he thought it was unusual, but did not pursue it further because the foot had a pulse. Respondent testified in hindsight that was incorrect and he should have pursued an arteriogram.

19. Respondent testified he does not doubt there was an injury to the artery, and perhaps there was a tear and some bleeding that proceeded over the next fourteen hours until he next saw NR. Respondent testified it could have been a partial tear, but he just does not believe he cut the artery in half. Respondent noted he put retractors in front of the artery and he thinks he may have torn it with a retractor pulling on it, but he does not think he transsected it. Respondent was asked if this was still his position in spite of the vascular surgeon's operative report and the lack of evidence in NR's chart to support his position. Respondent agreed he did not document his notes correctly and indicated he has since corrected that. Respondent testified he documented pulses and he went by and examined NR's foot several times and got pulses, he put a pulse oximeter on the foot and there was equal saturation to the opposite foot. Respondent testified he agreed he did not document this, but it is what he found and the nurses documented it. Respondent was asked if he documented there were pulses or that the pulse oximeter was used. Respondent testified he did not. Respondent was asked if the vascular surgeon

documented there were ever pulses. Respondent testified he did not. Respondent was asked if pulses were documented by the radiologist who helped do the Dopplar study. Respondent testified the radiologist's report states "flow through the trifurcation," but does not indicate pulses. The Board noted the other physicians involved do not document pulses, but Respondent insists there were pulses and refers only to peripheral additions to the chart from the nurses.

20. Respondent was asked how much blood loss would there have been if there were a transsection of the artery. Respondent testified he suspected he would have been called over the evening about hemodynamic issues with NR if he had completely transsected the artery. Respondent was asked if he agreed it was possible to have a complete transsection of the popliteal artery and still have palpable distal pulses. Respondent testified at the time he did not know this, but he has since done a lot of reading and now understands this to be correct. Respondent testified he put this new knowledge to use recently in the emergency room when he was asked to admit a gunshot victim to his service for observation, he insisted that despite the fact the patient had pulses, the foot was cooler and there was a bullet in the popliteal space, and refused. Respondent noted the patient was finally transferred to another facility where they did an arteriogram and found three holes in the popliteal artery.

21. Respondent was asked if compartment syndrome ever came into his mind the day after surgery considering the peroneal nerve issue and weakness of the dorsiflexion and other issues. Respondent testified it did, but the leg (from the calf down below) was soft and, with it being an incomplete palsy, he thought it was more likely a traction injury to the peroneal nerve. Respondent was asked if he thought of measuring the compartment pressures. Respondent testified he did not because the compartments were soft down below. The Board noted and Respondent agreed he did not document this.

22. Transsection of the popliteal artery during total knee arthroplasty is a rare, but recognized complication. The standard of care required Respondent to recognize damage to the

popliteal artery and the development of post-operative vascular compromise and treat them timely and appropriately.

23. Respondent deviated from the standard of care because he failed to properly diagnose the transsection of the popliteal artery and failed to monitor complaints of pain, coldness to the lower extremity, and diminished pulses and bleeding.

24. Respondent's failure to timely diagnose a transsection of the popliteal artery resulted in the amputation of NR's limb.

25. The Board noted a mitigating factor was the unavailability at the facility of an arteriogram.

CONCLUSIONS OF LAW

1. The Arizona Medical Board possesses jurisdiction over the subject matter hereof and over Respondent.

2. The Board has received substantial evidence supporting the Findings of Fact described above and said findings constitute unprofessional conduct or other grounds for the Board to take disciplinary action.

3. The conduct and circumstances described above constitutes unprofessional conduct pursuant to A.R.S. § 32-1401(27)(q) ("[a]ny conduct or practice that is or might be harmful or dangerous to the health of the patient or the public"); and 32-1401(27)(ll) ("[c]onduct that the board determines is gross negligence, repeated negligence or negligence resulting in harm to or the death of a patient.").

ORDER

Based upon the foregoing Findings of Fact and Conclusions of Law,

IT IS HEREBY ORDERED:

1. Respondent is issued a Letter of Reprimand for failure to timely diagnose a transsection of the popliteal artery resulting in the amputation of a patient's limb.

RIGHT TO PETITION FOR REHEARING OR REVIEW

Respondent is hereby notified that he has the right to petition for a rehearing or review. The petition for rehearing or review must be filed with the Board's Executive Director within thirty (30) days after service of this Order. A.R.S. § 41-1092.09(B). The petition for rehearing or review must set forth legally sufficient reasons for granting a rehearing or review. A.A.C. R4-16-102. Service of this order is effective five (5) days after date of mailing. A.R.S. § 41-1092.09(C). If a petition for rehearing or review is not filed, the Board's Order becomes effective thirty-five (35) days after it is mailed to Respondent.

Respondent is further notified that the filing of a motion for rehearing or review is required to preserve any rights of appeal to the Superior Court.

DATED this 9th day of February, 2006.

ARIZONA MEDICAL BOARD 1913 STATE OF ARIZONA

THE ARIZONA MEDICAL BOARD

By _____
TIMOTHY C. MILLER, J.D.
Executive Director

ORIGINAL of the foregoing filed this 10th day of February, 2006 with:

Arizona Medical Board
9545 East Doubletree Ranch Road
Scottsdale, Arizona 85258

Executed copy of the foregoing mailed by U.S. ~~Certified~~ Mail this 10th day of February, 2006, to:

Frederick M. Cummings
Jennings, Strouss & Salmon, P.C.
201 East Washington Street
Phoenix, Arizona 85004

Executed copy of the foregoing mailed by U.S. this 10th day of February, 2006, to:

Jose A. Padilla, M.D.
Address of Record